Individual Residential Wells and Irrigation Wells

Well Standards

- Before 1985 Pollution Control Act
- June 1985 Well Standards
- August 1999 Permitting Regulation
- April 2002 Revised Well Standards

Existing Wells

- Does the well meet the well standards?
- Does the well work?
- How is the Water Quality?

What SCDHEC looks for

- Grout
- 12" above ground
- ID tag
- Wellhead Sealed
- Sampling Spigot
- Distance from contaminate source





Same regulations apply to irrigation wells





Distance from contaminate sources

- Property lines and buildings 5 feet
 Sewer lines (main) 20 feet
- Septic tank/tile field 50 feet
- Lakes, streams, surface water 50 feet
- Animal feedlots, barns, stables 50 feet
- Chemical, herbicide, pesticide and petroleum storage or handling site 100 feet

Underground Storage Tanks

• Heating oil tanks are petroleum storage and must be 100 feet from the well.

• Propane tanks are not considered to be a groundwater contaminate source.

• "The further the better"

Does the well work?

- Pumps, tank, and piping are not regulated by DHEC.
- Well head is regulated must be sealed regardless of operation.
- Licensed Well Driller vs. Plumber

Water Quality

Health

- Bacteria
 - Total
 - Fecal
- Nitrate
- Lead
- Volatile Organic Compounds (VOC)

Taste and Odor

- Hydrogen Sulfide
- Iron
- Manganese
- Hardness
- Salinity

Water Quality, Private wells and SCDHEC

- SCDHEC does not regulate water quality or quantity in private wells
- Fecal contamination or sand <u>may</u> be a result of well construction
- Health issues may effect closing (HUD 5)
- Taste and Odor may effect sale (cosmetic)
- All can be treated!

Getting a New Well

- Finding a Well Driller
- Contract and paperwork
- Permitting
- Bacteria Sample with Residential well.

Finding a Well Driller

- Well drillers must be licensed and bonded through LLR. Find out at llr.state.sc.us license lookup under Environmental Certification Board or ask well inspector.
- Irrigation companies need certified driller.
- Shop around but "you get what you pay for"

Contract and Paperwork

- Use a contract; yours or the drillers
- Dry holes common in shallow and rock wells, you may have to pay <u>and</u> get a deep well.
- Warranty; well vs. tank and pump.
- Water quality is generally evaluated by the homeowner, who may call you first.

SCDHEC documentation

- Notice of Intent (NOI) application for coverage under a general permit.
- Water Well Record details construction of and use of the well. Submitted by driller within 30 days of well completion.
- Results of bacteria and metals/minerals samples analyzed by SCDHEC.

Permitting

- Obtain and Submit a Notice of Intent (NOI)
- Provides coverage under a General Permit
- \$70.00 for residential well
- \$50.00 for irrigation well
- Confirmation letter goes to whoever paid for the permit.

Notice of Intent

- Can be filled out by the Owner, Driller, or agent
- Triplicate Form: copy for SCDHEC, homeowner, and Driller.
- Driller must have copy on site
- 48 hour notice
- Instructions on the back of form.

Well Inspections

- New wells inspected at random
- Copy of inspection can be obtained from SCDHEC well inspector or Central Office
- Wells put in after 2000 may have been inspected
- Home inspectors should know what to look for and have proper sampling technique

Bacteria Sample

- \$20.00 for existing well
- Included in Residential well permit
- 7 to 10 day turnaround
- Must use SCDHEC bottle (instruction included)
- Disclaimer due to no control over sampling technique or chain of custody

Metal and Mineral Sample

- \$50.00
- At least 2 liter plastic bottle with screw on top.
- Lead and Nitrate included
- 6 to 8 week turnaround

Where do I get sample bottles and NOI forms?

- County Health Departments
- Counties that have Environmental Health Services Office
- Environmental Quality Control District Office
- SCDHEC Central Office (Columbia)
- NOI form is online at SCDHEC.NET/water, then groundwater on quick links and go to the private well program

Sample Location

- Take the sample at the wellhead whenever possible to isolate the well from the tank and piping.
- For wells that have been idle, allow to run as long as possible before collecting sample.
- Samples that cannot be taken at the wellhead should be taken as close to the wellhead as possible.



Goal

 Protect public health by ensuring that people can find out about their water quality

• Protect the groundwater resource by ensuring that wells are constructed properly